

Why Should I be concerned about Infiltration and Inflow ?

Infiltration and Inflow decreases the efficiency and capacity of wastewater collection systems and treatment systems, which can impact a community's potential for growth.

Infiltration and Inflow can hurry the need for the construction of relief sewer facilities.

Infiltration and Inflow contributes to the hydraulic overloading of treatment processes, which can affect public health and the community's compliance with state and federal water quality standards.

Infiltration and Inflow can cause back-flooding of sewers into streets and private properties.

Infiltration and Inflow can increase collection system and treatment facility operating costs—for example, adding to the necessary run time for pumps and pump stations and costs for energy, maintenance, and repairs.



Damaged sewer line caused by root intrusion



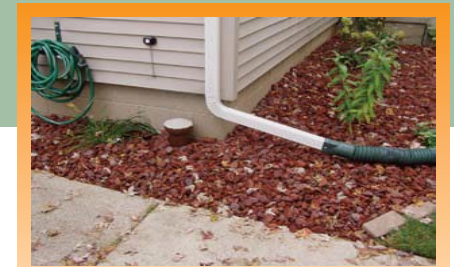
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City of Belmont

Infiltration and Inflow



Prevent sanitary sewer overflows and sewer back-ups by eliminating storm water inflow and groundwater infiltration into the sanitary sewer system.



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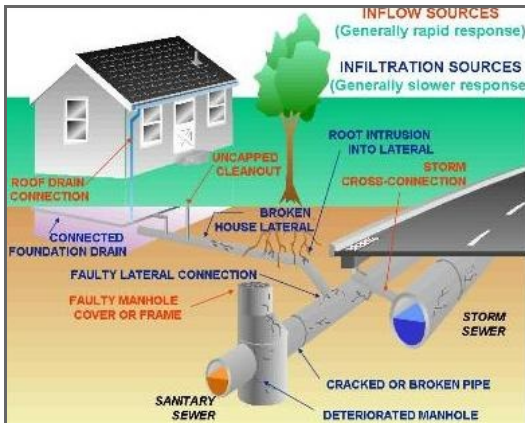


Infiltration and Inflow FAQ's

What is Infiltration and Inflow?

Infiltration occurs when water seeps into sewer pipes through cracks or joint failures, and faulty connections.

Inflow is stormwater that enters the sanitary sewer system through roof drains, downspouts, sump pumps, yard drains, foundation drains and storm drain cross-connections.



Improper and damaged connections allow rainwater to bypass the storm system and overwhelm the sanitary sewer system.

Why is infiltration and inflow a problem?

Sanitary sewer systems are designed to carry wastewater away from toilets, dishwashers, sinks, or showers.

A stormwater system is designed to carry rainwater away, and are normally much larger than sanitary sewer systems because they are designed to carry much larger amounts of water. When clear water enters sanitary sewer system, it is transported and treated like sanitary waste water.

Wet weather magnifies existing inflow and infiltration sources. As a rain event begins, the inflow and infiltration sources start filling the sanitary sewer systems with clear water, eventually filling the sewer systems to capacity.

Once the sanitary sewer systems have reached capacity or becomes overloaded, wastewater flows at much higher water level than normal and if sanitary fixtures or drains are below this overload level, water will flow backward through the sanitary sewer pipe, flooding basements or households and causing manholes to pop open releasing wastewater onto the street.



How can I be sure my property drainage connections are properly draining?

House Sewer Connections: Broken or damaged sewer lateral service connections including missing or broken clean out caps, also contribute to rain-derived groundwater and stormwater entering the sanitary sewer system. These type of defects should be repaired.

Area Drains: Area drains located in drive-ways, basements, or lawns that drain to the sanitary sewer system should be redirected to the storm drain systems or dry well.

Roof Drains: If your roof drains are connected to the sanitary sewer systems, the drains should be redirected on the ground or to a dry well. Another alternative is to utilize rain barrels to collect roof drain stormwater for use on lawns or gardens.

Sump Pumps: If you have a sump pump that is connected to the sanitary sewer system, it should be redirected to the storm system, your property landscape, or dry well.

